



COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

SIXTH FLOOR
PRUDENTIAL BUILDING
195 NORTH TERRACE
ADELAIDE

CEREALS

SOUTH AUSTRALIA

SEASON 1963-64

SCOPE

This Bulletin shows details of the South Australian cereal and hay harvests for the year ended 31st March 1964 as obtained from the annual collection of Agricultural and Pastoral Statistics.

SEASONAL
CONDITIONS

Good rains during April 1963 provided an excellent opening to the season and further rains in May consolidated the position. Some areas in the south eastern and northern portions of the State were exceptionally wet in June and July, and extreme frosts during August damaged some crops in the western parts of Eyre Peninsula. Rainfall was below average during September but very useful rains in October gave a boost to crops in nearly all areas. These rains, with favourable conditions in November and December, enabled good yields of all cereal grains. The preliminary figure of average rainfall over agricultural areas during the cereal growing period April to November 1963 is 15.11 inches, 2.39 inches above the mean April-November rainfall for the previous 58 years.

SUMMARY
OF AREAS
AND YIELDS

Reports at the beginning of the season indicated that farmers intended to sow approximately 2,804,000 acres of wheat, 1,182,000 acres of barley, and 1,081,000 acres of oats. The areas actually sown were 2,849,000 acres to wheat - an increase of 204,000 acres from the previous year, 1,165,000 acres to barley - an increase of 77,000 acres from the previous year, and 956,000 acres to oats - an increase of 117,000 acres.

The record wheat crop of almost 54 million bushels harvested from 2.8 million acres was 5.9 million bushels more than the previous highest of 48.1 million bushels harvested from 4.1 million acres in the 1931-32 season. The barley yield of 24.3 million bushels was 6.3 million bushels more than that for the previous season, while the yield of almost 9.2 million bushels of oats was 3.4 million bushels more than the 5.8 million bushels obtained in 1962-63.

The estimate of the combined yields of wheat, barley, and oats, for 1963-64 contained in my bulletin issued in January of this year was 88.3 million bushels. Actual yield for these three cereals was 87.5 million bushels - 25.4 million bushels more than in 1962-63 but 12.6 million bushels less than the record 100.1 million bushels harvested in the 1960-61 season.

TABLE 1 - CEREAL HARVEST, SOUTH AUSTRALIA, 1963-64

Crop	Area		Yield	
	Total Sown(a)	Sown for Grain (b)	Total (c)	Per Acre
	Acres		Bushels	
Wheat	2,848,690	2,802,258	53,971,269	19.26
Barley	1,164,561	1,123,104	24,336,555	21.67
Oats	956,336	500,650	9,149,149	18.27
Rye	37,291	31,345	152,841	4.88
Field peas	32,785	30,167	490,192	16.25
	Area Cut (Acres)		Tons	
Hay (all kinds)	357,592		488,218	1.37

- (a) Includes area sown for hay and forage.
(b) Includes crops which failed.
(c) Excludes weight of bags.

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TABLE 2 - WHEAT, BARLEY, AND OATS: AREA AND YIELD, COUNTIES AND DIVISIONS, SOUTH AUSTRALIA, 1963-64

DIVISION and County	Wheat			Barley			Oats			Rainfall (a)
	Area	Yield	Yield per Acre	Area	Yield	Yield per Acre	Area	Yield	Yield per Acre	
	Acres	Bushels	Bushels	Acres	Bushels	Bushels	Acres	Bushels	Bushels	Inches
CENTRAL										
Adelaide	6,657	127,806	19.20	14,176	401,430	28.32	2,477	54,125	21.85	21.23
Carnarvon	6,387	94,023	14.72	5,026	111,181	22.12	10,319	272,314	26.39	17.46
Eyre	48,013	924,789	19.26	5,546	109,691	19.78	7,137	156,063	21.87	17.84
Fergusson	113,711	2,880,480	25.33	218,614	6,141,013	28.09	11,550	266,228	23.05	17.31
Gawler	112,945	2,735,241	24.22	59,532	1,561,443	26.23	16,217	380,301	23.45	15.74
Hindmarsh	8,439	209,739	24.85	12,214	308,870	25.29	7,178	175,415	24.44	17.94
Light	58,975	1,006,113	17.06	22,180	447,647	20.18	13,997	252,632	18.05	19.78
Sturt	61,643	1,219,764	19.79	30,793	617,090	20.04	10,327	226,177	20.89	17.04
LOWER NORTH										
Burra (incl. Kimberley)	28,322	551,379	19.47	1,719	33,104	19.26	5,884	124,645	21.18	17.33
Daly	248,894	6,276,672	25.22	109,862	3,097,933	28.20	34,013	770,214	22.64	15.69
Stanley	191,558	4,717,827	24.63	38,243	888,729	23.24	30,181	728,324	24.13	18.53
Victoria	168,811	4,141,278	24.53	36,660	964,503	26.31	17,386	440,312	25.33	14.66
UPPER NORTH										
Dalhousie	63,927	1,365,846	21.37	4,517	91,009	20.15	8,260	193,125	23.38	12.10
Frome	104,559	2,273,853	21.75	8,299	174,811	21.06	10,842	222,043	20.48	14.36
Newcastle	9,423	173,670	18.43	Included in "Other Counties"			988	13,079	13.24	(b)
Other Counties	1,776	18,699	10.53	53	571	10.77	195	3,801	19.49	(b)
SOUTH EASTERN										
Buckingham	42,252	875,739	20.73	7,705	144,105	18.70	39,627	932,669	23.54	12.95
Cardwell	7,806	98,820	12.66	11,342	208,637	18.40	3,750	62,837	16.76	14.29
Grey	1,509	33,423	22.15	1,498	47,448	31.67	1,203	38,466	31.98	18.44
MacDonnell	9,794	207,339	21.17	2,888	59,319	20.54	10,704	253,200	23.65	17.06
Robe	4,441	106,548	23.99	2,533	33,314	13.15	8,394	203,620	24.26	19.48

1941-1942

1943-1944

1945-1946

1947-1948

1949-1950

1951-1952

1953-1954

1955-1956

1957-1958

1959-1960

1961-1962

1963-1964

TABLE 2 - WHEAT, BARLEY, AND OATS: AREA AND YIELD, COUNTIES AND DIVISIONS, SOUTH AUSTRALIA, 1963-64 (continued)

DIVISION and County	Wheat			Barley			Oats			Rainfall (a)
	Area	Yield	Yield per Acre	Area	Yield	Yield per Acre	Area	Yield	Yield per Acre	
	Acres	Bushels	Bushels	Acres	Bushels	Bushels	Acres	Bushels	Bushels	Inches
WESTERN										
Bosanquet	2,975	56,679	19.05	500	11,518	23.04	789	9,638	12.22	(b)
Buxton (incl. York)	116,405	2,319,066	19.92	7,620	142,763	18.74	19,800	302,462	15.28	13.38
Dufferin	50,135	703,689	14.04	2,084	35,976	17.26	14,228	163,683	11.50	12.14
Flinders	94,355	1,823,469	19.33	59,880	1,261,349	21.06	21,821	431,106	19.76	15.99
Hopetoun	5,860	69,180	11.81	1,529	24,737	16.18	1,660	21,555	12.98	(b)
Jervois	305,216	5,001,948	16.39	53,610	881,019	16.43	36,424	476,113	13.07	14.79
Kintore	21,644	299,955	13.86	1,945	33,452	17.19	7,036	87,990	12.51	10.10
Le Hunte	125,344	2,162,361	17.25	14,682	258,209	17.59	23,194	324,427	13.99	11.15
Musgrave (c)	71,863	1,273,641	17.72	47,811	1,006,125	21.04	10,449	180,557	17.28	15.40
Robinson	120,501	2,193,927	18.21	27,716	599,407	21.63	25,620	388,679	15.17	13.65
Way	87,586	1,331,232	15.20	4,608	77,952	16.92	22,882	298,550	13.05	9.87
MURRAY MALLEE										
Albert	141,969	1,654,902	11.66	28,783	356,160	12.37	15,916	164,486	10.33	12.31
Alfred	137,430	1,806,282	13.14	32,254	395,264	12.25	12,121	126,627	10.45	11.37
Buccleuch	80,028	940,767	11.76	142,768	2,200,697	15.41	21,060	216,772	10.29	14.35
Chandos	107,024	1,932,003	18.05	69,278	1,073,691	15.50	7,222	84,334	11.68	13.31
Hamley (incl. Young)	11,434	102,129	8.93	1,297	15,566	12.00	1,122	11,160	9.95	(b)
Russell	22,647	260,991	11.52	33,339	520,842	15.62	8,177	91,420	11.18	13.11
DIVISIONS										
Central	416,770	9,197,955	22.07	368,081	9,698,365	26.35	79,702	1,783,255	22.37	17.75
Lower North	637,585	15,687,156	24.60	186,484	4,984,269	26.73	87,464	2,063,495	23.59	16.35
Upper North	179,685	3,832,068	21.33	12,869	266,391	20.70	20,285	432,048	21.30	13.52
South Eastern	65,802	1,321,869	20.09	25,966	492,823	18.98	63,678	1,490,792	23.41	15.60
Western (c)	1,001,884	17,235,147	17.20	221,985	4,332,487	19.52	183,903	2,684,760	14.60	13.72
Murray Mallee	500,532	6,697,074	13.38	307,719	4,562,220	14.83	65,618	694,799	10.59	12.96
Outside of Counties				Included in County Musgrave - Western Division						
WHOLE STATE	2,802,258	53,971,269	19.26	1,123,104	24,336,555	21.67	600,650	9,149,149	18.27	15.11

(a) Rainfall over agricultural areas during the crop-growing period April-November 1963. The figure for each county is obtained by averaging recorded rainfall at selected stations in crop-growing areas; the figure for each division is an average of the results so obtained for each county in the division weighted by area under crop. All figures are preliminary and subject to revision.

(b) Not regarded as crop-growing areas.

(c) Includes Outside of Counties.

TABLE 3 - RYE AND FIELD PEAS: AREA AND YIELD, DIVISIONS, SOUTH AUSTRALIA, 1963-64

Division	Rye			Field Peas		
	Area	Yield	Yield Per Acre	Area	Yield	Yield Per Acre
	Acres	Bushels	Bushels	Acres	Bushels	Bushels
Central	602	4,404	7.32	16,383	263,094	16.06
Lower North	372	4,800	12.90	12,748	217,168	17.04
Upper North	-	-	-	Included in Lower North		
South Eastern	341	1,887	5.53	436	2,750	6.31
Western	1,000	4,206	4.21	413	4,710	11.40
Murray Mallee	29,030	137,544	4.74	187	2,470	13.21
Total State	31,345	152,841	4.88	30,167	490,192	16.25

TABLE 4 - HAY: AREA AND YIELD, DIVISIONS, SOUTH AUSTRALIA, 1963-64

Division	Hay (All Kinds)		
	Area	Yield	Yield Per Acre
	Acres	Tons	Tons
Central	134,754	197,733	1.47
Lower North	70,801	96,685	1.37
Upper North	16,718	21,406	1.28
South Eastern	65,306	88,785	1.36
Western (a)	32,600	39,530	1.21
Murray Mallee	37,413	44,079	1.18
Total State	357,592	488,218	1.37

(a) Includes "Outside of Counties".

Yield per acre comparisons for selected years when rainfall during the crop growing period was similar to that for 1963-64 are shown below.

TABLE 5 - CEREAL YIELDS, SELECTED YEARS, SOUTH AUSTRALIA

Season	Average Rainfall Apr.-Nov. (a)	Average Yield per Acre			
		Wheat	Barley	Oats	Hay (All Kinds)
	Inches	Bushels	Bushels	Bushels	Tons
1905-06	15.78	11.46	19.27	15.26	1.37
1915-16	15.02	12.46	20.00	16.87	1.55
1932-33	14.61	10.43	19.31	10.27	1.23
1955-56	15.71	17.96	23.61	17.13	1.41
1960-61	15.59	23.56	27.15	22.41	1.57
1963-64	15.11 (b)	19.26	21.67	18.27	1.37

(a) Rainfall over agricultural areas.

(b) Preliminary.

AREAS SOWN
FOR ALL
PURPOSES

The following table shows acreages sown for all purposes (grain, hay, and forage) for the seasons 1960-61 to 1963-64 together with farmers' estimates of areas which they intended sowing for the current 1964-65 season. The greatest area ever sown to wheat in South Australia was 4,507,213 acres in 1930-31 when only 267,369 acres were under barley. From then until 1958-59 a general upward trend in barley acreages was matched by a decline in those for wheat. For the 1930-31 season the acreage under barley was 5.9 per cent of that under wheat; in 1958-59 it reached 93.6 per cent, but the proportion has decreased in each succeeding year to 40.9 per cent in 1963-64.

In the autumn of 1964 the intended sowing of barley for the 1964-65 season was 43.0 per cent of the intended sowing of wheat.

TABLE 6 - AREAS SOWN FOR ALL PURPOSES, SOUTH AUSTRALIA

Crop	1960-61	1961-62	1962-63	1963-64	1964-65(a)
	Acres				
Wheat	2,027,008	2,269,548	2,644,910	2,848,690	2,838,071
Barley	1,588,418	1,294,028	1,088,272	1,164,561	1,221,172
Oats	907,250	630,221	839,249	956,336	1,187,987
Rye	58,665	37,644	34,981	37,291	(b)
Field peas	29,828	31,541	35,881	32,785	39,806

(a) Acreage for 1964-65 is that intended to be sown when details were collected in the autumn.

(b) Not available.

WHEAT

The record wheat harvest of 53,971,269 bushels in 1963-64 was obtained from 2,802,258 acres. Areas of wheat sown for grain in South Australia have been substantially increased during recent years and the area sown during 1963 was the highest since 3,080,401 acres in the 1938-39 season.

Areas, yields, and yields per acre, relating to South Australian wheat production for the years 1959-60 to 1963-64 are shown below.

TABLE 7 - WHEAT: AREA AND PRODUCTION, SOUTH AUSTRALIA

Particulars	Unit	1959-60	1960-61	1961-62	1962-63	1963-64
Total area	acre	1,605,420	2,027,008	2,269,548	2,644,910	2,848,690
Grain area	acre	1,549,499	1,969,423	2,229,211	2,595,145	2,802,258
Yield	bushel	11,928,966	46,395,600	33,854,157	38,338,860	53,971,269
Yield/acre	bushel	7.70	23.56	15.19	14.77	19.26

Varieties of wheat sown for all purposes for the years 1961-62 to 1963-64 are shown in the following table.

TABLE 8 - WHEAT: VARIETIES SOWN, SOUTH AUSTRALIA

Variety	Area			Proportion of Total Area		
	1961-62	1962-63	1963-64	1961-62	1962-63	1963-64
	Acres			Per Cent		
Bencubbin (a)	48,215	40,618	30,358	2.12	1.54	1.07
Bungulla	2,795	2,478	2,436	0.12	0.09	.09
Claymore	113,172	106,776	93,672	4.99	4.04	3.29
Dirk (a)	292,156	299,063	282,094	12.87	11.31	9.90
Dundee (a)	4,478	3,939	2,332	0.20	0.15	0.08
Eureka	5,296	4,733	2,256	0.23	0.18	0.08
Festival	6,121	6,931	3,979	0.27	0.26	0.14
Gabo	447,991	500,498	536,205	19.74	18.92	18.82
Heron	2,522	25,177	142,634	0.11	0.95	5.01
Insignia (a)	667,900	926,372	1,092,599	29.43	35.02	38.35
Javelin (a)	42,421	35,575	25,910	1.87	1.35	0.91
Marathon	4,758	4,803	3,099	0.21	0.18	0.11
Mengavi	89	1,084	2,800	-	0.04	0.10
Modesty	5,864	5,801	2,976	0.26	0.22	0.10
Olympic	10,863	11,357	11,482	0.48	0.43	0.40
Pinnacle	63,225	80,299	72,634	2.79	3.04	2.55
Quadrat	17,954	15,113	8,248	0.79	0.57	0.29
Rapier (a)	18,658	18,638	15,926	0.82	0.71	0.56
Reldep	6,529	5,345	4,401	0.29	0.20	0.15
Sabre	300,459	353,942	337,999	13.24	13.38	11.86
Scimitar (a)	40,830	34,726	21,265	1.80	1.31	0.75
Sherpa	2,699	3,778	5,621	0.12	0.14	0.20
Sword	5,804	5,124	3,587	0.25	0.19	0.13
Wongoondy	69,184	68,478	60,683	3.05	2.59	2.13
Yande	10,910	6,541	5,266	0.48	0.25	0.18
Other (incl. unspec.)	78,655	77,721	78,228	3.47	2.94	2.75
Total area	2,269,548	2,644,910	2,848,690	100.00	100.00	100.00

(a) Includes back cross.

BARLEY

The barley yield for 1963-64 of 24,336,555 bushels averaged 21.67 bushels per acre. The highest production recorded was 42,233,118 bushels in 1960-61, and the best average yield was 28.27 bushels per acre in 1958-59.

The following table shows details relating to South Australian barley production for the years 1959-60 to 1963-64.

TABLE 9 - BARLEY: AREA AND PRODUCTION, SOUTH AUSTRALIA

Particulars	Unit	1959-60	1960-61	1961-62	1962-63	1963-64
Total area	acre	1,325,689	1,588,418	1,294,028	1,088,272	1,164,561
Grain area	acre	1,289,936	1,555,687	1,270,904	1,052,886	1,123,104
Yield	bushel	11,857,192	42,233,118	21,292,421	18,004,881	24,336,555
Yield/acre	bushel	9.19	27.15	16.75	17.10	21.67

The area of barley sown for grain in 1963-64 totalled 1,123,104 acres, 1,077,279 acres of 2 row yielding 23,419,820 bushels and 45,825 acres of 6 row yielding 916,735 bushels.

The varieties of barley sown for all purposes for the years 1961-62 to 1963-64 are shown below.

TABLE 10 - BARLEY: VARIETIES, SOUTH AUSTRALIA

Variety	Area			Proportion of Total Area		
	1961-62	1962-63	1963-64	1961-62	1962-63	1963-64
	Acres			Per Cent		
2 Row - Maltworthy	198,188	157,595	165,391	15.32	14.48	14.20
Prior	943,371	780,960	743,171	72.90	71.76	63.82
Noyep	11,965	38,877	144,366	0.92	3.57	12.40
Other 2 Row	83,720	65,066	52,784	6.47	5.98	4.53
6 Row - All Kinds	56,784	45,774	58,849	4.39	4.21	5.05
Total area	1,294,028	1,088,272	1,164,561	100.00	100.00	100.00

OATS

The oats yield for 1963-64 was 9,149,149 bushels from 500,650 acres - a yield of 18.27 bushels per acre. Record production in South Australia was 11,992,515 bushels in 1958-59.

Details of oats production in South Australia for the years 1959-60 to 1963-64 are shown below.

TABLE 11 - OATS: AREA AND PRODUCTION, SOUTH AUSTRALIA

Particulars	Unit	1959-60	1960-61	1961-62	1962-63	1963-64
Total area	acre	813,426	907,250	630,221	839,249	956,336
Grain area	acre	505,499	512,165	323,662	415,613	500,650
Yield	bushel	2,504,497	11,477,592	4,390,899	5,770,242	9,149,149
Yield/acre	bushel	4.95	22.41	13.57	13.88	18.27

Varieties of oats sown for all purposes for the seasons 1961-62 to 1963-64 are as follows:-

TABLE 12 - OATS: VARIETIES, SOUTH AUSTRALIA

Variety	Area			Proportion of Total Area		
	1961-62	1962-63	1963-64	1961-62	1962-63	1963-64
	Acres			Per Cent		
Algerian	38,966	19,298	11,672	6.18	2.30	1.22
Avon	43,163	143,673	293,357	6.85	17.12	30.67
Ballidu	37,263	33,969	32,132	5.91	4.05	3.36
Dale	6,271	5,123	2,596	1.00	0.61	0.27
Fulghum	48,146	47,219	35,163	7.64	5.63	3.68
Kent	65,690	133,419	162,842	10.42	15.90	17.03
Kherson (incl. Early)	206,096	263,426	246,138	32.70	31.39	25.74
Kurrajong	13,023	14,036	15,017	2.07	1.67	1.57
New Zealand Cape	41,209	32,804	28,511	6.54	3.91	2.98
Orient	87,271	90,177	73,168	13.85	10.74	7.65
Other (incl. unspec.)	43,123	56,105	55,740	6.84	6.68	5.83
Total area	630,221	839,249	956,336	100.00	100.00	100.00

RYE

During 1963-64 the area of rye sown for all purposes was 37,291 acres. The 31,345 acres sown for grain yielded 152,841 bushels at an average yield per acre of 4.88 bushels.

FIELD
PEAS

From 30,167 acres planted for grain in the 1963-64 season 490,192 bushels were reaped, an average of 16.25 bushels per acre. In the 1962-63 season 392,088 bushels were obtained from 32,396 acres. In the autumn, farmers indicated that they intended sowing 39,806 acres in 1964-65 for grain or green forage.

Of the 32,785 acres sown in 1963-64 for all purposes 3,346 acres were sown to Collegian, 15,787 acres to Dun, 12,600 acres to White Brunswick, and 1,052 acres to other varieties.

HAY

The yield of hay (all kinds) in 1963-64 was 488,218 tons from 357,592 acres. The greatest amount produced was 1,100,217 tons in 1915-16 obtained from a record area of 709,813 acres.

A summary of areas and production of hay for the years 1959-60 to 1963-64 is shown below.

TABLE 13 - HAY: AREA AND PRODUCTION, SOUTH AUSTRALIA

Particulars	1959-60	1960-61	1961-62	1962-63	1963-64
	Acres				
Area					
Wheaten	52,076	51,649	33,527	44,278	40,772
Oaten	118,149	152,750	82,664	116,351	140,666
Other	75,074	188,234	92,450	126,814	176,154
All kinds	245,299	392,633	208,641	287,443	357,592
	Tons				
Yield					
Wheaten	43,082	88,058	46,325	54,769	56,753
Oaten	74,710	243,188	101,933	147,399	185,435
Other	88,621	285,009	137,543	204,195	246,030
All kinds	206,413	616,255	285,801	406,363	488,218
Yield per acre					
Wheaten	0.83	1.70	1.38	1.24	1.39
Oaten	0.63	1.59	1.23	1.27	1.32
Other	1.18	1.51	1.49	1.61	1.40
All kinds	0.84	1.57	1.3	1.41	1.37

CEREALS
USED ON
FARMS

The following table shows details of cereals and hay used on farms for seed and feed purposes during the years 1962-63 and 1963-64.

TABLE 14 - CEREALS USED ON FARMS, SOUTH AUSTRALIA

Particulars	Unit	1962-63		1963-64	
		Seed	Feed	Seed	Feed
Wheat	bushel	2,924,784	950,688	3,097,422	900,609
Barley	"	1,258,830	2,268,255	1,386,005	2,209,679
Oats	"	981,005	3,022,602	1,089,894	3,123,618
Hay	ton	-	321,309	-	311,706

Farmers have reported that 2,922,777 bushels of wheat were retained on farms for 1964 seeding and that 733,788 bushels were being kept for feed purposes.

D.L.J. AITCHISON

DEPUTY COMMONWEALTH STATISTICIAN

Commonwealth Bureau of Census & Statistics,
ADELAIDE, S.A.
9th September 1964.

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